

an electrode having a platinum-rhodium layer and a layer comprising platinum material on top of the platinum-rhodium layer.

6. The capacitor of claim 1, wherein the layer comprising platinum material has a thickness within the range of about 50 to about 300 Angstroms.

7. The capacitor of claim 1, wherein the layer comprising platinum material has a thickness within the range of about 50 to about 150 Angstroms.

14. A capacitor, comprising:

a lower electrode having a platinum-rhodium layer and a layer comprising platinum material on top of the platinum-rhodium layer;

an upper electrode; and

a dielectric layer of a ferroelectric or high dielectric constant dielectric material formed between said lower and upper electrodes, wherein said dielectric layer is in contact with the platinum layer of said lower electrode.

19. The capacitor of claim 14, wherein the layer comprising platinum material has a thickness within the range of about 50 to about 300 Angstroms.

20. The capacitor of claim 14, wherein the layer comprising platinum material has a thickness within the range of about 50 to about 150 Angstroms.

38. A capacitor, comprising:

a lower electrode having a titanium layer, an alloy layer on top of the titanium layer, wherein the alloy layer comprises approximately 60 to approximately 97 percent platinum and approximately 3 to approximately 40 percent rhodium, and a layer comprising platinum material on top of the alloy layer;

an upper electrode; and

a dielectric layer of a ferroelectric or high dielectric constant dielectric material formed between said lower and upper electrodes, wherein said dielectric layer is in contact with the layer comprising platinum material of said lower electrode.

43. The capacitor of claim 38, wherein the layer comprising platinum material has a thickness within the range of about 50 to about 300 Angstroms.

44. The capacitor of claim 38, wherein the layer comprising platinum material has a thickness within the range of about 50 to about 150 Angstroms.

50. The capacitor of claim 38, wherein the upper electrode has a platinum layer and a platinum-rhodium layer on top of the layer comprising platinum material.

Please cancel claims 55 through 123 respectively.